

I.S.P.C.
December 9, 2004 Meeting Minutes

Attendees: *Ray Stevens, Don Herz, Randy Ober, Ken Kuszak and Doug Thomas*

Administration:

Budget Preparation

We've started Budget preparation and preliminarily it looks pretty good. At this time our thoughts are that we will be reducing our staffing by one FTE. This will help to lesson the blow of the extra pay period that occurs every twelve years. Do to additional technology staff being added to some customer departments, we are starting to see a slight reduction in our PC support field work. There has been a trend over the last few years to allow other departments to add PC support staff. Typically however, there is no correlation between the number of PCs they support compared to IS PC support personnel. Typically they support 25-100 PCs while IS staff are expected to support about 300-400 per person. If we had a staff person centrally we could do that office plus some other offices with that one FTE. There is no question that they can be more responsive to their own office, but it's not a very cost effective way to do business.

The FTE that used to coordinate user training will be doing more Notes work. Previously this person was 50% training and 50% Notes. Right now we are looking at the development projects that we have out there and we are not certain that we need to refill that position with what we currently have on the plate. ay period that occurs every twelve years, that occurs in the 05/06 year. We would hope than any reviews from another department for a technology type of person would be scrutinized pretty heavily because it seems like when some of the customer or user departments add staff they are having to support a lot less. We feel pretty strongly that adding staff centrally is much for efficient

Networking Projects:

Redundant Downtown Loop

Commonwealth has installed and terminated the redundant fiber between K Street and IS. That installation completes the loop from the Hall of Justice over to K Street and then it spokes back to Star Tran and to the Police Garage and then it goes from K Street back to our building. We do have the jumpers all done for our building, they had to order some more connectors for the jumpers at K Street. Remember that K Street is also the hub for all of our wireless facilities so all of the wireless infrastructure also gets enhanced capabilities with this addition. We hope to have the loop up and in operation by late next week.

One of the things that drove this at this time is the fact that we had to relocate some of our downtown fiber due to the lot recently built north of the County City Building. That was an unbudgeted item and it was one of the items that the Budget Office put in the report explaining areas where budgets we exceeded. This was the first time since I've been here (12 years), we exceeded our operating budget. As a revolving fund we have this capability if the "money is in the bank", which it was. The overage in networking was about \$100,000. Approximately \$40,000 of it related to this fiber relocation with another \$40,000 being related to the Trabert Hall/Mental Health/Health Department fiber coming in about \$40,000 over the budget estimate

we made 14 months in advance of the project actually being undertaken. The remaining \$20,000 related to installing fiber at Fire Station #14, which is the backup 911 Center. The remodeling in IS which was to be funded by the Building Commission was the other item creating the overage. The Building Commission didn't have the money to fund this due to other projects, so we funded it with IS fund balances. This was the first thing that had been done to IS offices in about 15 years.

ADSL Circuit Migration

Networking continues to migrate our remote sites over to ADSL with very positive results.

Corrections Cabling Problems

At Corrections we did identify some problems with data collisions that led to print problems. In reviewing the cabling it became apparent that some of Mike Thurber's, (Corrections Director), maintenance staff did some creative cable installation in the past. We found that they had been going up in the ceiling, cutting the old Pre-Category 3 cables (used with the old PRIME Jail System), and simply twisting Category 5 Cable (currently used), up to it. So they found that the run from the network closet to the destination office was partially old sub par cable and partially Cat-5 cable. Evidently the maintenance staff didn't understand the ramifications. To be honest, although it's less than perfect, this type of installation will often work for phone cabling. They got the colors matched up and everything but what was happening was that it would not pass the data over head loss test. Consequently, we went in and pulled about 15-18 new Category 5 cables to remedy this situation. We are hoping that this will take care of our historically problems that we've had at corrections. In some cases an old cable came out of the walls and they twisted the new cable behind a desk and it was our yellow Cat-5 going into the computer. Category-3 (historically used for phone and early (ie pre 1990), computer applications), is not rated to cover the speeds and has a fewer number of twists. This stuff was, Pre-Cat-3, old prime cable from when they had the old PRIME System which was basically...terminal cable that they had used.

"eBay Withdrawal"

We've discovered a new illness that has hit the City/County Network, "eBay Withdrawal". We've gotten some amount of "heat" from cutting off E-Bay access. One agency that will go unnamed more than any other. What happened is that we had some problems over Thanksgiving weekend with the Notes server and we tracked it down to a mailbox in which about 90% of the activity in that mailbox was eBay activity. So, we have theorized that somehow through this eBay activity that his mail files had become corrupted and we had three people working on it over Thanksgiving weekend to get it rectified and get the server stabilized. We did get it rectified once we rebuilt this mail file. What was somewhat interesting was this person was bidding, buying and such which was clearly not work related or an appropriate use of City time.

To determine the level of use of eBay I had Networking run a daily activity for the City and the County on E-Bay. What we determined is that we had a printout about 1 ½ inches thick for the three days selected. This was all traffic through the internet connection across the network and it was three days. Initially we only ran one day, but it was bad, we run another day and then a third. At that point I stopped because it was very clear it was heavily used. The days selected were Mondays and Fridays. Initially we felt the only eBay activity that we could think of and

consider legitimate was the surplus of property through purchasing.

It seemed reasonable to block these activities at the firewall and allow Purchasing to either work with us, or use our test machine outside the firewall for their surplus activities. We sent messages to the Finance Department and the Commissioner's Office informing them of our intentions to block this (with a one week notice). I suggested that they might want to consider forwarding my intentions and explanation to Directors and Elected Officials through the mail lists that they maintain. We cannot easily do an executive summary that shows the activity by user, but we know with subnets (offices are involved), and it is pretty widespread with some having more activity than others. One of the law enforcement departments in the County called and questioned the decision, and thought it was a "knee jerk" reaction. They felt it was inappropriate because they needed to search eBay for stolen property. They indicated I should deal with it department by department. Unfortunately, the firewall does not allow us to pick and choose who can go where and who can't. I explained this to them, and then went on to let them know that in the three days we searched they had a minimum of three people using it for purely personal business. In fact one employee of the department had 99 auctions/sales in a two week period. Evidently when there is stolen property they go out on E-Bay and see if it is for sale. We thought that is probably a legitimate reason that had totally slipped our minds and had we thought of that we would have personally contacted Terry Wagner and/or Bill Jarrett, as well as Tom Casady. To meet this need we decided that we would install a \$29/month ADSL circuit and put a hub for law enforcement to use to access eBay. To be honest this will also help them in some of their investigatory practices too. We will give both the Sheriff and Police Department two machines each and pay the \$29 a month so they won't have to bear any of the additional cost. As a follow up we described what was being sold and he knew who to go and talk to and said he'd handle it personally. Actually there were at least three people engaged in auction type activities whether it be purchasing or selling. In talking to Todd Beam at LPD he said that they really don't use it for that unless the victim calls and says they saw their stuff for sale on the internet. The County Board this morning authorized a modest expenditure of money at this point in for the Sheriff to do whatever he needs to connect into eBay.

The one thing that is absolute is that these machines have to be stand alone and can in no way shape or form being connected (either by wire or wireless), to the network. Jim Baird at LSO said he fully understood that and would abide by the directive.

Again, it is not just this one department that had usage, it is multiple departments. So it's not fair to single out only the Sheriff's Office. We just did a little more looking at there's after they indicated they had business use. Some activity in other departments is just searching for stuff, but some of it is actually logging on to eBay and transacting business. The major offender in the Sheriffs's Office was following up to questions from individuals about the stuff he/she was selling. We don't think the County is into selling pictures of railroad stations and things like that and that was what was being sold by this person. Someone was looking into Arabian horses for sale and another attempted to purchase a tie, (but was outbid). Todd said that their protocol is not to go out searching blindly through eBay because they already have all of that stuff out there on the Web for the use by pawn shops and other interested parties. There are a lot of other sites like "Overstock.com" that we've already locked out. That was generating a considerable amount of activity. All of this taxes the connection we have out and from the internet itself, it certainly

creates unnecessary, avoidable traffic inside the network, for those attempting to get to the web site and leads to a general loss in productivity. It was so widespread that we thought the appropriate thing to do was to shut it down all together. We did get a few calls from users regarding their inability to get to eBay, but only the Sheriff's Office questioned it. The use of eBay for personal use is contrary to the eMail/Internet Use Policy that all employees sign.

PC Support:

Server Maintenance

The City word processing server in a short period of time is going to come off of "Parts Depot", which means that they will no longer store the parts in Omaha. While they are on this program if we need them we can generally get them within a couple hours. City word processor goes off of that program on February 14, 2005. Unfortunately we didn't get it in the budget so we need to see what we can do to get the server replaced before we go unprotected. We don't feel comfortable having it go off that we would say that we need to replace that sometime before February 14. Most of the City agencies that have word processing store their documents on this server. We estimate it will cost about \$6,500 to replace this server. We probably could run it because we haven't had any problems with it. However, if it did go down it might take a day or two to get parts in here and get it back up and running and we would have a lot of screaming people.

The other server that needs to be replaced due to coming off of parts depot is the imaging server. The imaging server was originally purchased by the County for the Register of Deeds. The County is about 80% of the storage on that. In addition to the County, Personnel also uses it, and Planning wants to start using it. The County originally purchased it and spent about \$10,000 on the original server. Then the City paid for about \$5,000 in upgrades about 18 months ago when Personnel started using it too. If you look at the current storage usage it is about 80% County departments and 20% City departments. When the City came to the County and asked if they could use that server instead of maintaining two servers, the City upgraded that server and put about \$5,000 of memory and disk drives into. So, there is about a \$15,000 investment that has been made. As Ken indicated with the City WP server, the imaging server also is coming off parts depot and we also failed to put that in the budget last year. Now this one is a little bit cheaper. We estimate that it is in the \$5,400 range and we would like authorization to purchase that and see what you felt would be a good split there. Planning is now interested in putting some Permit Plus documents out there too. The bottom line is that we need to figure out some way to split the \$5400 to replace the server. Unfortunately, Dave is not here but we'll follow up with him and Steve Hubka at the City after the meeting. We will try to get an estimate of what planning will use it in terms of how much storage they might get to see how that might affect the percentages.

Oracle Redundant Servers

A couple of months ago we were approached by Public Works on having their Oracle databases a little more accessible in case the server went down. They were going to do a project on their own and what they decided to do was to let us see what we can come up with that would provide a more enterprise wide solution. We made a proposal to Nick McElvain at Water that met his needs. This solution allows for two servers located at IS to share the same storage facility. This provides redundant "on line" server hardware. Taking in one step further we also included a third server to be located at their North 27th Street location, which will be utilized should we

have a total building failure at the IS location. At IS one server would be working and if it has a problem and goes down the other one automatically takes over and the user wouldn't even know anything happened. This improvement won't be just for Public Works it will be City-County wide. Anybody on the Oracle Server will receive benefit. The major applications which would be improved are most GIS applications, Building and Safety's Permits System, the County's TRIMS (document management) System and the recently developed Personnel Applicant Tracking System. In addition, there are also some smaller applications. While nothing is ever 100%, this is certainly a major enhancement. Water is sharing the cost with us because they are the one that brought it forward and they had some budgeted funds to improve this area. So, it is about a \$45,000 project of which they are paying \$25,000 and we're paying about \$20,000. We talked with Nick this week, gave him the estimates and he said they looked good and to go ahead with it. So, we will probably get those servers ordered this week or next week so that we can move forward with the project.

S.A.N.(Storage Area Network)

One other hardware project that we have been talking about for the last two or three years is a Storage Area Network in our building. What that would do is allow all the LAN servers that we have down at our building to share a group of disk drives instead of having to buy separate sets of disk drives for each server. This saves money because you can purchase less overall storage and better utilize the drives. It gives you the ability to allocate as much space as each one needs. In addition, as one needs more you can allocate more to it on the fly out of the unused portion of the storage unit. It also extends your back-up window, now we have three of four different back-up tape drives and we are just running out of time at night. Some of them are just running five or six hours and if we get anymore we will run out of time in the evenings. If you have twenty different servers and you have to restore all of those it takes more time, so this will also enhance our disaster recovery scenario. The SAN would be much cleaner in the event of a full recovery. Initially what we want to do is to put one SAN in our building and then eventually have another one off-site so that we have two sets of our data. That way if our building ever got wiped out all we have to do is get these new servers hooked up to the remote storage site and we'd be back in business. We are thinking about getting one and rolling it out on two or three servers initially. To begin with we'd like to use the City and County Word Processing servers so we can get our feet wet and get experience using a SAN. We don't want to jump into all the servers at one time. Although eventually we would like to have them all at the same. As we replace servers we could migrate them onto the SAN therefore, as well as the Alpha, which is the Criminal Justice System because that can also co-exist there. The systems that it doesn't catch are the AS-400's and the IBM Enterprise Server, (Mainframe), and we will probably have to look at some other alternatives there. Pricing on this can run from \$50,000 on up. We've talked to one vender this week and they thought they could do it for around \$40,000. We haven't talked to them in detail or seen a demo of exactly what it is going to do, but they said they felt they could set us up for about \$40,000. These systems are scalable, so as we grow so could they. Last year we spoke to HP and Dell and they were around \$80,000-\$90,000 to start. We would also like to put \$50,000 in the budget and split that up half-City and half-County and then we will put those two servers on there next year for a start and that will give us our experience. Eventually, what we would like to see is that if we have different agencies using it, and clearly we would, would be charged based on their volume of storage. That way County and City General funds would not be picking up all the costs associated with this enhancement. Logically the General Funds would cover only

costs associated with General Fund Agencies and Enterprise and Internal Services Funds would fund their own storage needs. Part of the reason this might work out well this year is because our FTEs should come down by one so some of the historical costs in billable hours (in 04/05), may be shifted to this area. Our Novell LAN Administrator, (Tim Storer), spends time going through and monitoring storage needs and possible abuses (really more lack of cleaning up old files), and then he goes out and sends nasty grams asking people to clean up their files. This has varying results, but there is no question that a SAN System would be a much better way to handle storage issues. The price has come down in the last couple of years. We've kept waiting for something that was affordable that would meet the needs of all platforms, but we are coming to the realization that there are not any affordable enterprise wide solutions, thus we think it is time to move forward with the LAN/CJIS solution. In the past we have attempted to get some grant money, however with Emergency Services gets the grant dollars, none are being forwarded to us for our submitted projects. Historically all the dollars have gone to the EOC, Law Enforcement and the Fire Departments. Apparently they have been more interested in first responders, but this is protecting the data of the first responders and what are they going to do out in the field if they have no data? We may go ahead and go around Emergency Services and apply for our own grant directly from the Federal Government.

Possible State Grant for 802.16

We are considering attempting to apply for a grant through the state to look at this 802.16 communications. It allows you to put up fewer towers and it has a radius of thirty miles, but in a downtown area you are probably looking at four or five with the buildings and everything. Last week we were at the Technology Summit at the Cornhusker and the Secretary of State's Office announced that they were going to do some local government grants for the use of new technology of up to \$10,000. With \$10,000 we could put one of these new towers on K Street and see how it works. Equipment will probably not be available until the middle or late next year, but we are contemplating applying for a grant in this area because that might be something that would be very desirable to our remote users. The first step is to look at the grant application, their target projects and the commitment that would be required. The 802.16 is a very advanced technology and much more affordable than the mesh networks that are being developed in a handful of cities. If you have a tower every four miles or so we could cover quite a lot of area. With LES having fiber everywhere we could work with them to get the back-haul because they are very interested in it as well as far as partnering with us on a project and having it at their disposal for their field personnel. Currently the Police Department and Sheriff's Office are using mobile data terminals across that 800 mhz radio system which only runs at 9600. Because of the speed and packet size constraints they cannot really do any imaging, any mug shot type of stuff, it has to be small data bursts. So, this may be a way of transporting that and taking that traffic off of the 800 system and making that more available pure voice communications. Since 802.16 provides such a wide coverage with each tower there wouldn't be that much needed to cover the whole county. There is still going to be some issues with valleys that we are going to have to work through but we are going to try to get a grant.

Windows XPSP II

We have been "pushing out" Windows XP Service Pack II for the last two to three weeks on the network. At this time we think we have all the PCs completed. Our Windows Network Administrator, (Bob Loos), looked at the server earlier this week and he said utilization on it is

back to normal. It was running pretty high while we were doing the initial push-out. Other problems we had were some people would shut down their PC while the update was being pushed out. Typically that was detrimental to their PC so we had to go in and rebuild them. We also had some problems with Elections Office since they only have a ADSL line, (not fiber), going out to them they had quite a few PCs. It had saturated their communication lines so much during the day that we moved that down to 56K to push it out so it would not eat up all of their bandwidth. We told them to leave their PCs on at night for a couple of days and then we turned it back up at night so it would do the updates in off hours. That worked much better and reduced the impact on their prime shift operations. We do have a situation with PeopleSoft that requires a manual setting by user to over ride the generic XPSP II set up. We don't know how or why People Soft designed it this way but it allows you to initiate a second string via a pop up window. Unfortunately, Windows XPSP II standard setting was blocking that capability. So, what you had to do was go into SP II and make exceptions to allow certain sites to have pop-up windows. They put a lot of power in the desk top of SP II in terms of administrative and the fire wall also helps but there are some nuances that require addressing..

HP Service Provider

We buy the vast majority of our desktop through a HP service provider. Annually we pick a service provider. This year we awarded it through the bid process to Midland Computer. What Midland gets is they get a 10% "kickback" from HP for being our service providers because they are supposed to handle any problems that we have and act as a liaison. Evidently HP changed the "kickback" amount to Midland and they felt they could no longer honor the 3 ½ % service credit they were giving us per the annual award (to be our service provider). Since this was what we based the award on, we felt it necessary to contact the other bidders and give them another opportunity to bet the modified amount Midland proposed. We use this money's for printer repairs, they cannot be used for purchases of desktops. Midland told us that they could only give us a quarter of a percent (not the 3.5% they bid).. BIZCO, (the other original bidder), told us that they would give us 1 ½ %. Therefore, we contacted Midland and told them that we would go with BIZCO now. They sent an email out to Vince (Purchasing Agent), this morning and let him know the results of our follow up.

Training

Since we don't have our Customer Training anymore due to retirement. And considering that there has been a continual reduction in training requests from agencies we are not refilling the FTE as a trainer. Since we've dropped this service there have been a few questions about where users can get training. Video Professor offers CD based training. We have ordered three sets of various courses from them, including Microsoft Word, Access, Power Point, Lotus 1, 2, 3, Excel, and Word Perfect. They had a special deal going so they sold them to us for \$20 per CD which normally they run around \$60 per CD. It is self-study at your pace as your time permits. So, we have three sets of those. Purchasing received a set of them right now that they are trying them out. What we will do is that if an agency decides to keep them we will sell them for \$25 per CD and we will order another set to replace that one the agency is keeping. Not many offices have contacted us and expressed interest in training. When we first went from the Honeywell word processing system to Word Perfect there was a huge requirement for training but quite frankly over the last few years we have had very little requests for training and having an on staff trainer was probably not the most cost effective way to go.

Systems Development Projects

The projects were looking good on PeopleSoft at this point. Everything is kind of self-explanatory in the attached report.

Utilizations

These look good.

Next Meeting

January 13, 2005